AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A ~~computer~~ system to present ~~to a user interface~~ data about ~~an~~ at least one artificial structure in or over at least one hydrological feature, the system comprising:

at least one database for ~~receiving and~~ storing data about the at least one artificial structure, wherein the stored data includes structural data ~~about the structure~~ and is associated with one or more of the at least one artificial structure, where the at least one artificial structure is associated with at least one threshold;

at least one data source for providing the stored data ~~about the structure~~;

~~a communications network for transmitting data about the structure from the at least one data source to the database or to the user interface and for transmitting from the database to the user interface;~~

~~the~~ a user interface for presenting at least one warning signal associated with the at least one artificial structure ~~to the user data about the structure transmitted from the at least one database or the at least one data source~~based on a comparison of: (i) the stored data, and (ii) the at least one threshold associated with: the at least one artificial structure and the stored data.

2. (Currently amended) The ~~computer~~ system of claim 1, wherein the at least one data source provides at least one of: hydrological data, meteorological data, geological data ~~or~~and device data.

3. (Currently amended) The ~~computer~~ system of claim 2, wherein the user interface presents at least one of: hydrological data, meteorological data, structural data, environmental data, geographical data ~~or~~and device data.

4. (Currently amended) The ~~computer~~ system of claim 1, wherein the user interface receives and displays real-time data from the at least one data source.

5. (Currently amended) The ~~computer~~ system of claim 1, wherein the at least one data source provides environmental data selected from the group consisting of soil, vegetarian, river, hydrological, coastal, tidal and seismic data.

6. (Currently amended) The ~~computer~~ system of claim 1, wherein the at least one data source provides meteorological data selected from the group consisting of radar, tide, snow and warning data.

7. (Currently amended) The ~~computer~~ system of claim 1, wherein the at least one data source provides structural data selected from the group consisting of structural detail, attributes, plans, inspection reports, maintenance memos and bridge history data.

8. (Currently amended) The ~~computer~~ system of claim 1, wherein the user interface presents data from at least a first data source and a second data source.

9. (Currently amended) The ~~computer~~ system of claim 7, wherein the user interface presents data by displaying a graphical representation of data from the first data source onto data from the second data source.

10. (Currently amended) The ~~computer~~ system of claim 8, wherein the first data source is associated with a map showing a meteorological condition, and the second data source is associated with a map showing the location of the structure.

11. (Currently amended) The ~~computer~~ system of claim 1 further comprising ~~a means~~computer instructions for prioritizing the stored data and ~~a means for~~ presenting a the at least one warning signal to a user.

12. (Currently amended) The ~~computer~~ system of claim 11, wherein ~~the means for presenting a~~ the at least one warning signal ~~is~~ includes at least one of: a telephone call, an e-mail, a page, a fax, and ~~or~~ an instant message.

13. (Currently amended) The ~~computer~~ system of claim 1, further comprising ~~a means for setting a threshold on the data such that when the data exceeds the threshold a high warning signal is sent~~ computer instructions to send the at least one warning signal to at least one of the user ~~or~~ and a central site.

14. (Currently amended) The ~~computer~~ system of claim 1 wherein the user interface comprises:

a general map of an area~~,~~ showing ~~hydraulic~~ the at least one artificial structures and the at least one hydrological features~~,~~

a second map showing detail ~~such as~~including at least one of: ~~the~~ population density, detouring options for traveling public, emergency facilities, existing evacuation routes, and real-time location of safety personnel responding to the event, and

a comparative chart of a threshold for the area that ~~has~~ caused a the at least one warning signal to be sent and a normal or expected data for the area.

15. (Currently amended) The system of~~as defined in~~ claim ~~13~~14, wherein the user can select at least one of: the ~~maps and detail to be displayed~~general map, the second map, and the detail.

16. (Currently amended) The ~~computer~~ system of claim 1, further comprising ~~a means~~ computer instructions for calculating risk probability, where the risk probability ~~which can~~

~~be~~ is used to prioritize the deployment of emergency personnel in response to the ~~a~~ ~~threshold~~ at least one warning signal.

17. (Currently amended) The ~~computer~~ system of claim 16, wherein the ~~means~~ computer instructions for calculating risk probability uses a weighted risk function to create a ranking of risk probability.

18. (Currently amended) The ~~computer~~ system of claim 1, wherein a user profile determines the data to be presented to the user.

19. (Currently amended) The ~~computer~~ system of claim 1, wherein the stored data includes hydrological data, meteorological data, structural data, environmental data, geographical data or device data.

20. (Currently amended) A system for monitoring ~~an~~ at least one artificial structure in or over at least one hydrological feature, the system comprising:

a computer in communication with

at least one data source which provides measurement data representative of at least one measurement of an environmental condition affecting the at least one artificial structure; and

at least one database which stores at least one ~~predetermined~~ threshold for the measurement data;

wherein the computer compares the measurement data with the at least one~~predetermined~~ threshold and communicates ~~an~~at least one alert when the measurement data exceeds the at least one threshold.

21. (Currently amended) The system of claim 20, wherein the at least one data source provides at least one of meteorological data, hydrological data, geological data, ~~or~~and device data.

22. (Currently amended) The system of claim 20, wherein the measurement data is at least one of: radar data, tide data, snow data, warning data, water flow data, water stage data, ice data, soil data, vegetation data, seismic data, ~~or~~and scour data.

23. (Currently amended) The system of claim 20, wherein the at least one alert is at least one of: a page, a telephone call, a fax, ~~or~~and an email.

24. (Currently amended) The system of claim 20, where ~~in~~ the at least one alert identifies the at least one threshold exceeded by the measurement data, the measurement data exceeding the at least one threshold, and the location of the at least one artificial structure corresponding to the at least one threshold exceeded by the measurement data.

25. (Currently amended) A method for monitoring ~~an~~ at least one artificial structure in or over at least one hydrological feature, the method comprising:

receiving, over a communications network, measurement data representing at least one measurement of an environmental condition affecting the at least one artificial structure;

~~storing predetermined threshold for the measurement data in database;~~

comparing the received measurement data to at least one ~~predetermined~~ threshold ~~with the measurement data~~; and

communicating an alert, ~~via an interface,~~ when the received measurement data exceeds the at least one threshold.

26. (Currently amended) The method of claim 25, wherein the received measurement data is at least one of: meteorological data, hydrological data, geological data, ~~or~~and device data.

27. (Currently amended) The method of claim 25, wherein the received measurement data is at least one of: radar data, tide data, snow data, warning data, water flow data, water stage data, ice data, soil data, vegetation data, seismic data, ~~or~~and scour data.

28. (Currently amended) The method of claim 25, wherein the alert is at least one of: a page, a telephone call, a fax, ~~or~~and an email.

29. (Currently amended) The method of claim 25, where ~~in~~ the at least one alert identifies at least one of: the at least one threshold exceeded by the received measurement data, the received measurement data exceeding the at least one threshold, and the location of the at least one artificial structure corresponding to the at least one threshold exceeded by the received measurement data.

30. (Currently amended) A system for prioritizing at least one artificial structures in or over hydrological features, the system comprising:

a computer in communication with

data sources which provide measurement data representing at least one measurement of an environmental condition associated with ~~a plurality of hydraulic~~the at least one artificial structures;

at least one database which associates ~~stores predetermined thresholds corresponding to~~ the measurement data~~, wherein~~ with one or more of the at least one artificial structure, where the at least one artificial structure is associated with at least one threshold, ~~has an~~, where the at least one threshold is associated with a priority ~~and structure~~;

wherein the computer

compares the measurement data ~~from one or more data sources with~~ to ~~corresponding~~ the associated at least one thresholds to identify the measurement data ~~exceeded~~ exceeding the associated at least one thresholds;

identifies at least one artificial structures ~~corresponding~~ associated with the identified measurement data ~~to any exceeded thresholds~~; and

prioritizes the identified at least one artificial structures based on the ~~priorities~~ priority associated with the at least one threshold exceeded by the identified measurement data ~~of the exceeded thresholds~~.

31. (Currently amended) The system of claim 30, wherein the data sources provide at least one of: meteorological data, hydrological data, geological data, ~~or~~and device data.

32. (Currently amended) The system of claim 30, wherein the data is at least one of: radar data, tide data, snow data, warning data, water flow data, water stage data, ice data, soil data, vegetation data, seismic data, ~~or~~and scour data.

33. (Currently amended) The system of claim 30, wherein the computer further provides ~~an~~ at least one alert that identifies at least one of: the exceeded threshold, the measurement that exceeds the threshold, the priority of the exceeded threshold and the location of the structure corresponding to the exceeded threshold.

34. (Currently amended) The system of claim 33, where in the at least one alert is a page, a telephone call, a fax, ~~or~~and an email.

35. (Currently amended) A method for prioritizing at least one artificial structures in or over at least one hydrological features, the method comprising:

receiving, over a communications network, measurement data representing at least one measurement of an environmental condition associated with ~~a plurality of hydraulic~~ the at least one artificial structures;

storing ~~predetermined thresholds corresponding to~~ the measurement data in at least one database to associate the measurement data ~~wherein a threshold has an associated priority and~~ with one or more of the at least one artificial structure, where the at least one artificial structure is associated with at least one threshold, where the at least one threshold is associated with a priority;

comparing the measurement data ~~from one or more data sources~~ with ~~corresponding~~ the associated at least one thresholds to identify measurement data exceeding the associated at least one ~~exceeded~~ thresholds;

identifying those of the at least one artificial structures ~~corresponding~~ associated with the identified measurement data~~to any exceeded thresholds~~; and

prioritizing the identified artificial structures based on the priority ~~of the exceeded thresholds~~associated with the at least one threshold exceeded by the identified measurement data.

36. (Currently amended) The method of claim 35, wherein the received measurement data is at least one of: meteorological data, hydrological data, geological data, ~~or~~and device data.

37. (Currently amended) The method of claim 35, wherein the received measurement data is at least one of: radar data, tide data, snow data, warning data, water flow data, water stage data, ice data, soil data, vegetation data, seismic data, ~~or~~and scour data.

38. (Currently amended) The method of claim 35, further comprising:

providing ~~an~~at least one alert that identifies at least one of: the at least one~~exceeded~~ threshold exceeded by the measurement data, the identified measurement data~~that exceeds the threshold~~, the priority of the at least one~~exceeded~~ threshold exceeded by the measurement data, and the location of the at least one artificial structure ~~corresponding~~ associated with ~~to~~ the ~~exceeded~~at least one threshold exceeded by the measurement data.

39. (Currently amended) The method of claim 38, where ~~in~~ the at least one alert is at least one of: a page, a telephone call, a fax, ~~or~~and an email.